



THE RARA RAG

Newsletter of The Rochester Amateur Radio Association, Inc.

Founded in 1931

JANUARY 2020
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PARKS ON THE AIR AND PORTABLE OPERATING

SCOTT THEIS, W2LW, RARA VICE PRESIDENT

This month, our club Secretary, Karl Heinz Kremer (K5KHK) will be discussing Parks On The Air or "POTA", and sharing his experiences.

POTA is a program that promotes operating from public lands like national parks or state parks. It is a perfect ham radio opportunity for the outdoor enthusiast, but also for the apartment dweller or somebody living with HOA antenna restrictions. In this presentation we will hear about what the program is, how activating and chasing works, how to collect awards, with some information about portable operating in general mixed in. Team K5KHK will also show off some of the gear used in the field.

Team members are Karl Heinz Kremer and his wife Susan, the best radial unwinder and winder in the Great Lakes area. Team K5KHK has logged almost 70 POTA activation attempts and chased after more than 750 activations. Karl Heinz is the POTA Mapping Representative for New York.



As indicated, POTA can be a team activity, so bring your spouse (or, if you are an outdoor loving spouse of a ham, bring your ham), and enjoy the outdoors together.

Karl Heinz is a software engineer with his electronic interest going back to his youth. He earned his Tech+ license in 1994 (N2XRQ) and recently his Extra (now as K5KHK). Karl Heinz worked for Kodak in Germany and eventually settled in the Rochester area. He enjoys home brewing and is certainly a very active ham in everything from POTA to digital modes to PI's. He also has conducted several RARA Academies as well as being very active in RARA events.

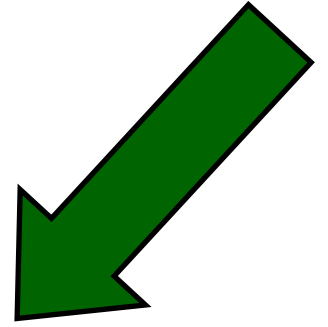
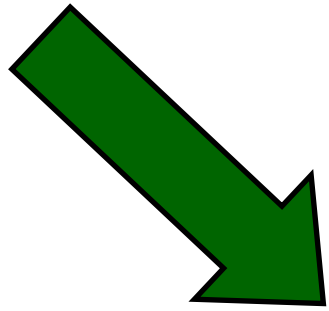
Please join us on Wednesday, **January 15th, 2020** (**Please Note! this is not the first Wednesday of the month**), 7:00PM at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, New York 14623



K2JD

N2EH

W2EOC



**THE RARA GENERAL MEETING FOR
JANUARY 2020**

WILL BE HELD ON

WEDNESDAY JANUARY 15, 2020



BOARDZ BUZZ

BRIAN O'CONNOR, KA2CGB

There is a lot going on with amateur radio in the Rochester area. Let me start off by wishing everyone in the RARA community Happy Holidays and Best Wishes for the New Year.

On The Bands

SAQ is the only remaining station of a commercial radiotelegraph network that spanned Europe and eastern North America. In the early morning of Christmas Eve, December 24, the 1924 Alexanderson 200 kW transmitter will send a Christmas message on VLF 17.2 kHz CW. The transmitter will be tuned up from around 2:30AM EST (0730 UTC) and the message will be transmitted at 3:00AM EST (0800 UTC). [More info.](#)

The ROC City Net has moved to 160m for the winter. Join them on 1924 kHz LSB at 7:30PM on Wednesdays.

The ARRL January VHF Contest runs from 2:00PM EST on Saturday, 18 January, until 10:59PM EST Sunday. New operators are encouraged to enter as FM-Only on 52.525, 146.55, 223.5 and 446.0 MHz simplex. Operators exchange call signs and Maidenhead Grid locator. If nothing else, get on the air during "activity hours" 6m:6AM+6PM, 2m:7AM+7PM, 1.25m:8AM+8PM, 70cm:9AM+9PM. Full details including a PDF log sheet are [here](#).

The December issue of QST brought news that the Rochester DX Association (RDXA) took 1st place nationwide for Field Day 2019 in category 3A. This marks the sixth time that RDXA has won 1st in category 3A. Congratulations!

Larry, KD2LGX, who is active on HF through UHF, recently added a second antenna array for EME. Using 2 m and 70 cm, his EME contacts span Australia to Zanzibar to include all continents except Antarctica. (Larry's activity was also mentioned in the October QST column "World Above 50 MHz".)

Livingston county ham Andy, K0SM, has been featured in two recent YouTube videos. He recently worked Peter, VA3ELE, on 10 GHz -- a 184 km path. Andy was using a small dish mounted on a tripod in his garage. [Watch here](#). And in an AWA video, Andy shows his hand made 1920s-style HF transmitters. [Watch here](#).

Several members of the Rochester VHF Group and the Ontario VHF Association are building transverters for 122 GHz (2.5 mm). The design employs an IC intended for use in automobile anti-collision radar.

On 12 December, the FCC unanimously approved Notice of Proposed Rulemaking 19-130 that will remove amateur radio from the 3.3-3.5 GHz (9 cm) band. This action will clear the band for use by 5G broadband.

According to [spaceweather.com](#), 2019 has had the greatest number of days with zero sunspots since 1913. But there's some encouraging news, too: a NOAA/NASA science panel has stated that Solar Minimum should occur this coming spring. And then begins the long, slow, build-up of solar activity towards the peak of Solar Cycle 25, which is predicted for the summer of 2025.

Inside RARA

Reminder: because New Year's Day falls on a Wednesday, the next RARA meeting will be held 15 January.

There will be three club activities in February: the monthly meeting (5th), Winterfest (15th), and an Academy workshop on the Arduino Microcontroller (22nd). Details will follow.

And it's official: the 93rd RARA Hamfest will be held June 6th in Hilton.

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CALENDAR OF EVENTS

WEDNESDAY JANUARY 15, 2020 - RARA General Meeting

7:00 PM at BSA Headquarters
2320 Brighton Henrietta Town Line Rd

THURSDAY JANUARY 16, 2020 - RARA Board of Directors Meeting

6:30 PM at Novaworks, 333 Metro Park, F-500

SATURDAY FEBRUARY 15, 2020 WINTERFEST 2020

JUNE 6, 2020 RARA HAMFEST 2020

July 11, 2020 RARA PICNIC 2020



EDUCATION

TIM BROWN, WB2PAY, EDUCATION COORDINATOR

GOTA (GET ON THE AIR)

RARA 's 2020 Field operating events

In addition to regular field operations, each event will feature a **Theme Topic**
February 15th RARA Winterfest at Mendon Ponds Park

-- **Using rigs with DSP Filters**

- May -- **Parks on the Air** at a State Park
- Learn about low impact **portable operations**
- June Tour De Cure -- **VHF/UHF Net Operations**
- June ARRL Field Day
-- **Contesting - FD sites in the area will be posted in June RAG**
- July RARA Picnic at Mendon Ponds Park -- **Stealth and Portable Antennas**
- August Lighthouse Lightship Weekend at Charlotte Lighthouse.
-- **HF and VHF operations**
- September -- **Digital Modes and CW Operations**
- October ARRL SET -- **Emergency Operations** with ARES/RACES
- October Pumpkin Patrol -- **VHF/UHF Net Operations**

RARA ACADEMY WORKSHOPS FOR 2020

2020 Topics: (Dates to be confirmed & Locations TBD)

February 22nd -- 1030am to 1:30pm BASIC ARDUINO PROGRAMMING

Location: **Irondequoit Library Room 114** 10:30AM to 1:30PM

- Presenter will be Forest Shick, WA2MZG - [Course Information and Links](#)

March 14th -- FLDIGI Digital software - Both Live and simulated contacts will be made.

- Presenter will be Paul Conaway, KD2DO

April 11th -- DSTAR, DMR & FUSION MODES - Learn the basics of these modes.

- Presenters will be Mike Moore, KC1NM and Steve Verzulli, KA1CNF

Latest Academy information is available at

https://www.rochesterham.org/rara_academy.htm

RARA LICENSE COURSES

2020 Winter/Spring License Classes

If you want to learn new skills, upgrade your license, make new friends, and have some fun, sign up for the Winter / Spring sessions of RARA's license classes.

License classes will commence at 7pm on Tuesday February 11, 2020.

Classes run from 7- 9:30pm for 10 weeks with FREE testing on the 11th week.

Classes will be held at RIT in the GLEASON building #9, rooms TBD the third week in January.

Licensing courses are FREE to **current** members and students. The cost for non-members is \$15.00.

Not a current RARA member? Register at:

<https://www.rochesterham.org/membership.htm>

ARRL Licensing manuals may be purchased for the discounted rate of \$25.00 at the January and February RARA meetings and the first night of class. Please make checks payable to RARA, or have exact amount.

In order to keep you updated on any schedule changes, please pre-register

<mailto:education@rochesterham.org>

THE ELMERS CORNER

Our next Elmers Corner will be at the Jan 15th Meeting from 6:15pm to 6:45pm prior to the start of the regular meeting. You may submit questions ahead of the session to education@rochesterham.org

Brian O'Connor, KA2CGB, will host the January session. Let our Elmer help you with your questions or topics of interest.

Dave Timmons, W2DST, will host the March session
Dave will help program your radio with CHIRP.

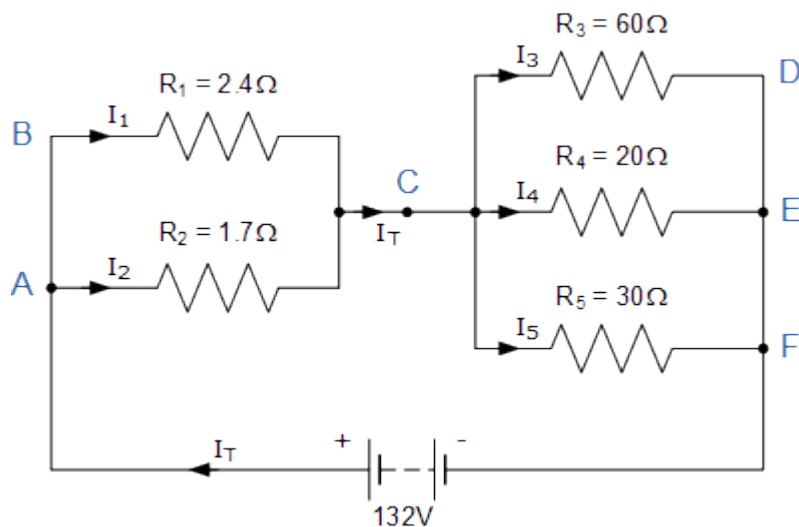
Please take advantage of these RARA sponsored training, education and operating opportunities.

Sign up for Academy Workshops and License Courses by emailing <mailto:education@rochesterham.org>

ELECTRONICS BRAIN TEASER

Kirchhoff's Current Law Example No1

What is the current I_T in this circuit?



Find the answer and find more Tutorials on DC Circuits at:

<https://www.electronics-tutorials.ws/dccircuits/kirchhoffs-current-law.html>

PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

Our last Public service event for 2019 will be the Rochester Museum and Science Center Holiday Science & Technology Days. I hope to see many of you at this joint RARA, RDXA, XARC event.

The list of planned 2020 Public Service events is shown in the table below. Please mark your personal calendars and plan to join us for one or more of these events. Public Service events are planned to help us hone our operating skills, acquire needed training, and test our equipment setups. While we want to be as ready as we can possibly be to help out in the case of a real emergency, these events also give us a chance to make a real difference in our community. One example is the Tour de Cure which we support for the American Diabetes Association. With our help, combined with the efforts of many other volunteers, \$1.2 million dollars will be raised locally to support the ADA's mission: to prevent and cure diabetes and improve the lives of all people affected by diabetes. Take a look at [this video](#) to learn what the Rochester Tour de Cure is all about.

For up to date information about all of our Public Service events take a look at our RARA website https://www.rochesterham.org/public_service.

Upcoming 2019 Event

Holiday Science & Technology Days	Rochester Museum & Science Center	Friday, Saturday, Sunday	12/27/2019 to 12/29/2019
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Upcoming 2020 Events

Tour de Cure	Xerox Campus Webster	Saturday	June 13, 2020
Bike MS: ROC the Ride	Genesee Valley Park - Rochester, NY	Saturday	Sept. 12, 2020
Fairport Lift Bridge Regatta	Erie Canal – Fairport, NY	Saturday	Sept. 19, 2020
JOTA	Camp Babcock Hovey	Saturday	Oct. 17, 2020
Pumpkin Patrol	Overpasses of the New York State Thruway	Friday & Saturday	Oct. 30-31, 2020
Holiday Science & Technology Days	Rochester Museum & Science Center	Monday - Wednesday	Dec. 28-30, 2020

January Raffle Prizes

- Mosley ANT-DIV-80 Antenna
- Elecraft DL1 20W Dummy Load
- MFJ-270MF LED DVM Cig. Lighter Plug

Coming in February

- MFJ-1811 Lightning Surge Protector

ROCHESTER HAMFEST 2020

TIM GUYOT, KB1POP, RARA PRESIDENT

Good News! The 2020 Hamfest is a go for Saturday June 6th 2020 at the Hilton Exempt Club 137 South Ave, Hilton, NY 14468.

We met with the Hilton Exempt Club and signed the contract. The forms have been filed with the ARRL and we're expecting approval this week. It's time to start advertising and planning.

Thanks to Anand Choudri KC2KPG, we have an easy to follow procedure that includes all the steps to put on a great hamfest, and now that the contract is signed, the hardest part – finding a venue – is out of the way.

What we need now is a committee of 2-4 people to produce the event. We have committee members returning from last year, but we could use more help to spread the work. There are several steps to be taken between now and June 6th.

- Raffle and Prizes
- Publicity
- Exhibits
- Ticketing
- Parking
- Flea Market
- Facilities
- Food
- Talk-in
- Alternate Activities
- Exams

To be on the committee, you mostly need to be able to respond to e-mail, make a few phone calls, and attend about one committee meeting per month. If you're interested in being on the committee, please e-mail

president@rochesterham.org



From Zero to Not Quite Proficient in CW

Karl Heinz Kremer, K5KHK

I've been working on my CW skills now for a little more than a year, and even though I have a SKCC (Straight Key Century Club) "Centurion" certificate that shows that I had CW QSOs with 100 other SKCC members, I am not proficient. Here are a few things I've learned over the last year:

The RXCWG (RARA XRX CW Group) is a great group of people, including some very patient elmers. Without them, I would not have come that far – and I know that for sure because I've tried a few times over the years to learn CW. Anybody in need of ARRL CW tapes in mint condition?

Having 100 QSOs does not make you a good CW operator, but it does help to reduce the panic I felt the first few times I touched a key. I no longer hope that nobody will answer my CQ and I know what to do when somebody comes back. That alone is a huge improvement.

Most CW operators out there are nice people and are going out of their way to help us learners. Don't be afraid to ask for "AGN" if you don't copy something – or you think you did not copy something correctly.

Making a commitment to myself that I would have at least one CW QSO per day helped a lot to first of all get to that 100 mark with the SKCC, but also to get more experience and to help with copying faster CW.

CW still is hard work and does not come naturally. I have to concentrate, but every now and then something jumps out that all of a sudden makes sense – only to change again into a mess of beeps that don't seem to form any letters. But these aha moments come more often the longer I stick with it.

If you are using a straight key or a bug, becoming a member of the SKCC is a great way to get some low hanging fruit: It's much easier to find opportunities for a QSO when you know where people are listening for you. In addition to the SKCC calling frequencies, the club also provides a sked page where you can see where somebody is calling CQ, on what bands people are hanging out, but also to actually schedule a QSO. One of their operating events is the "Slow Speed Saunter" on the first day of every month, that's an event specifically made for us newbies.

If you want to learn more about the SKCC, check out their web site at <https://skccgroup.com>

There are resources out there to help us get better with CW, if you know your letters and numbers, take advantage of those and get on the air. You will not be the first one to make mistakes.

VHF GREENHORN TO JOURNEYMAN: RADIO SPORTS

EV TUPIS, W2EV

January 18th is the kickoff to the 2020 VHF "sporting season". VHFers across the region (and across the continent) will activate on non-repeater, FM simplex frequencies to join one of the biggest "on-the-air parties" of the year!

The "party" lasts from Saturday, January 18 at 2:00 PM until Sunday at 11:00 PM. Naturally, there will be periods of time when there are lots of participants and times when there are few (Sunday afternoon) but stations pop-up throughout the event.

Don't let the word "contest" fool you into thinking that you have to have a "super station" in order to participate. It's really more like an on-the-air "social" where participants exchange small amounts of information. While the hard-core contesters keep a log, non-contesters simply activate informally (without logging) just to "give away points" to others. Both approaches are welcome!

To participate, simply exchange your call sign and your grid with other stations. Determining your grid is easy. Roughly, think of the village of LeRoy, NY as the "4 corner point", where four grids converge. If you operate North-west of LeRoy, you are in FN03. If you operate North-east, you are in FN13. If you operate South-west, you are in FN02. If you operate South-east of LeRoy, you are in FN12.

CQ from W2EV

KD2IRH, this is W2EV in FN03

Roger FN13. 73. CQ from W2EV

W2EV, this is KD2IRH

Roger FN03. I'm in FN13

If your location is "too close to call", then zoom in on your location using the link at the end of this sentence and pinpoint your Grid:

<https://dxcluster.ha8tks.hu/hamgeocoding/>
(count only the first 4 characters as your Grid).

The simplest way to participate is to power-on your 2 meter radio and tune to 146.55 FM. Set your squelch "just barely on" and monitor for others calling "CQ Contest". Listen as participants exchange information. When you feel ready, join in!

They will give you their call sign and their grid. You give them yours. That's all

there is to it. Be careful though. Contesting is easy and somewhat addicting.

It gets even more fun if you have 70cm (446.0 MHz) or 1.35 meters (223.5 MHz) in addition to 2 meters. Once you contact a station on 2 meters, you can contact them again on the other bands for even more fun.

Don't worry if your home station isn't all that good or you have a homeowners covenant that keeps you from having outside antennas. You can load up the car and drive to a hilltop (like Cobbs Hill or Lodge at Woodcliff). The extra elevation will reward you with even more signals to hear and work.

One of the best ways to "graduate" from Greenhorn to Journeyman is to get on the air. The January VHF Contest is a great way to have a lot of fun doing so.

Silent Key

Robert P. Kuzmicki
KD2JRV
December 2, 2019

RAGS OF THE PAST

ED GABLE, K2MP, RARA HISTORIAN

20 Years Ago, January 2000

If you read this issue back on the day it hit your mail box, congratulations, you survived Y2K! RARA VP and program chairman Keith Freeberg N2BEL (sk), introduced the first meeting of this century with a topic not normally shared with RARA members and titled Our Children's Future Education. The presenter, Essie Calhoun, was a participant in General Colin Powell's America's Promise initiative and this evening's goal was to share with our members what their group is doing to promote educational and career initiatives with our children. Also unique to this meeting was the venue where RARA met at the Social Services Building at 111 Westfall Road. Atlantic Division Director Hugh Turnbull, W3ABC (sk), was a welcome contributor to this issue with his writings on the Foundation for Amateur Radio's (FAR) recent scholarships for the academic year 2000-2001, where seventy-three grants, from \$500 to \$2500 each, were distributed. On the local scene Lloyd Caves, WB2EFU (N2PU), started his multi part, multi issue writings where he keeps members informed of detailed plans for the June 2000, three day hamfest. As contributing editor for the YL Forum, Judy Stonehill, N2KXS (sk), this month was joined by Elaine Zack, N2KXG, who wrote telling of how she finally got down to studying for her ham ticket. She had lots of help as she was the fifth ham of her all Amateur Radio operator household. The Rochester VHF Group was well represented in this issue by Tim Stoffell, NS9E. If it's January in Rochester, and you're a "Grouper," the only topic could be the January ARRL VHF Contest where planning and winning strategies were the only task at hand. Writing for RDXA and all area DX'ers was Ed Gable, K2MP, and his DX Happenings Column. Here he reported the passing of Chod Harris, WB2CHO/VP2M (sk), previously of Rochester and later the DX Editor at CQ Magazine and a contributing editor of QST's DX news, of a heart attack. Other neat calls to log were XU7AAV, 9M6OO Spratly by N2OO, LZ0A So. Shetland and going QRT for good was hard to find FT5WH on Crozet. Tim Magee, WB2KAO, reported on the wrap up of the 1999 License class. His group graduated 13 new or upgrades with new FCC callsigns being in the KC2FUX series. The new year is only days when Ed Holdsworth, N2EH (sk). RARA's Public Service Coordinator, reported that there were already eleven public service events firmly planned and all requiring ham radio communications activity. Writing a very well done article on how to compose and prepare printed submissions for the Rag was George Platteter AA2FO (sk). The January Rag has always been a "full" issue with many clubs and organizations coming out of the woodwork to say "Hey, we're hear." And so it was with RAPS, the Rochester Area Packet Society where Roger Harnaart WB2BWQ (sk) told of a recent demonstration to their group by member Jon Dickson, N2JAC, using PSK-31 mode. With regret it was announced that Helen Bellor, W2ATX, was announced as a Silent Key. From the Want Ads you could buy an ICOM IC-751A \$495.00 from Ed K2MP. A relatively new commercial advertiser was Kitt Diebold N2NNJ, with Connecticom, offering Internet connecting services.



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Education Promise

Essie Calhoun Speaks on our Childrens' future Education

Kieth Freeberg, N2BEL

The future of our childrens' education will be addressed at our meeting on January 7, 2000. We will hear from Essie Calhoun of Greater Rochester's Promise, a participant in General Colin Powell's initiative, America's Promise. We are all concerned about educational standards and keeping them high not to mention keeping our area's children motivated and learning. Learn what this group is doing to promote educational and career initiatives with our children.

FAR Scholarships

Hugh Trumbul, W3ABC

THE FOUNDATION FOR AMATEUR RADIO, INC., a non-profit organization with headquarters in Washington, D.C., plans to administer seventy-three (73) scholarships for the academic year 2000-2001 to assist licensed Radio Amateurs. The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds ten of these scholarships with the income from grants and its annual Hamfest. The remaining sixty-three (63) are administered by the Foundation without cost to the various donors.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2500 with preference given in some cases to certain study programs.

Additional information and an application form may be requested by letter or QSL card, postmarked prior to April 30, 2000 from:

FAR Scholarships
Post Office Box 831
Riverdale, MD 20738

The Foundation is devoted to promoting the interests of Amateur Radio and its purposes.

Rochester Hamfest---Part I

Lloyd R. Caves, WB2EFU

There is just six months to go before the Rochester Hamfest/Atlantic Division Conference is upon us. This years Hamfest will be held on June 2, 3, and 4. Over the next few months this column will keep you informed as to what is taking place during that weekend and what the programs will be. The total program schedule will be in the May issue of the Rag showing the time and place of each so that you can schedule your time to take advantage of the programs that interest you. There is a lot to see when you attend this years Hamfest and you don't want to miss anything.

One of the main events of course is the manufacturers and exhibitors that will be in the Dome. This is the place you will be able to play with and get all the data and specifications on the equipment of your choice. After twisting the knobs on the equipment you will be able to make your purchase from one of the many vendors that will be there selling this equipment. The Dome will open to the public at 12:00 (noon) until 5:30 PM on Friday, 8:30 AM until 5:30 PM on Saturday, and 8:30 AM until 1:30 on Sunday.

The second main event is the Flea Market. This is one of the largest radio flea markets in the area and there will a lot of great deals on all kinds of items. You will want to be out there early to get the best deals. Remember, "The early bird gets the worm". The Flea Market will open at 6:00 AM on Friday morning and will remain open until the end

continued on page 8

RaRa Meeting

January 7, 2000

8:00 P.M.

Social Services Building

111 Westfall Road

Greater Rochester's Promise

Essie Calhoun

Antennas and Towers was the program for this new decade meeting held at the Monroe County Farm and Home Center, 8 p.m. sharp. Heading the program was a well known WNY amateur; Bud Hippisley K2KIR/W2JJ. Bud was then recently the SCM for WNY and a very active NTS participant. The 1980, RARA Dinner Dance was announced where on February 9th, at the Hospitality House, three different entree's will satisfy you and the xyl's in your life. Contact Len Gessin WA2ZNC or Alan Komenski AC2K, for your ten dollar tickets. RARA was pleased to offer an open house, two to five p.m., open to the public, to celebrate the renovated K2JD Club station at 350 East Henrietta Road. Alan Komenski AC2K, writing from The President's Desk, thanks the many RARA members who made possible the last RARA meeting held at the Genesee Hospital and hosted by John Helms WA2PVH. February 25th will see the start of the Spring RARA Code and Theory classes wrote Ed Holdsworth, N2EH. Classes were held at the K2JD club station. Tom Richmond, WB2IEY, reported their next meeting would be devoted to weak signal reception with an emphasis on satellite communications. A new CW sending record was made official as local amateur Chris Reich, WB2DYJ, sent Morse code for a continuous 24 hour period. The effort was accepted by the Guinness Book of Records and recorded in their archives. Flush with that success, Chris went on to promote CW operation by forming the Western New York CW Training Net held on 28.160 Mhz. Rick Wells, writing for the RDXA, used this time to encourage area DX'ers to again endorse and support the RDXA. The group had been experiencing declining membership for several years but is today a flourishing and very active group that brought contesting into a successful area of activity for the members. Field Day entry brought so far six first place nation-wide finishes in the hotly contested class 3A. From the Want Ads you could buy a H-P 608D Signal Generator form Gerry Vogt WA2GCF. A new commercial advertiser was Dick Jenk, WB2EEU, offering placement services for Engineers and Designers at his Buffalo Road Superior Design complex.

The RARA RAG

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JANUARY 4th MEETING ANTENNAS AND TOWERS

by Bud Hippisley, K2KIR/W2JJ

January may not seem like the optimum time for thinking about antennas, but the purpose of this month's program is to plant some ideas in your head so you'll be ready for those outdoor construction projects at the first trace of spring. (Besides, everybody knows that antennas put up in sub-zero weather work best.)

Our speaker is Bud Hippisley, K2KIR/W2JJ, of Syracuse, whom you may remember as having visited us in 1975 with his KH6 (Hawaii) dx-pedition slides. This time around, Bud has a two part presentation for us. Part one deals with antenna fundamentals and leads to a comparison of dipoles, inverted V's, verticals, beams, and quads. Part two is a slide presentation on installation techniques for guyed towers. You won't believe what one person working along can do until you've seen these shots!

Bud was first licensed in Auburn in 1954. He is an electrical engineering graduate of M.I.T. who designed digital computers for Honeywell and G.E. before joining Texas Instruments as a systems engineer. A former Section Communications Manager of Western New York, he is currently manager of the Eastern Area Net of the National Traffic System and (sometimes) defending champion of the Rochester Hamfest code receiving contest.

For a breath of springtime, come to the January 4th RARA antenna meeting at the regular meeting place, the Monroe County Farm and Home Center, 249 Highland Avenue, near South Avenue. Meeting time: Friday, January 4, at 8 p.m. sharp!

To Robert Erskine and Family;

All RARA members extend their sympathy over the recent sudden loss of his wife, Arlene.

RaRa OPEN HOUSE: K2JD STATION

There will be an open house on Sunday, January 20, 1980 at our Club Station facilities located at 350 East Henrietta Road, corner of Westfall Road.

Members of the RaRa Board of Directors will be on hand to answer questions on the station, RaRa, and amateur radio. Refreshments will be served from 2 - 5 p.m.

This is the first opportunity we have had to display our renovated facilities and we are looking forward to seeing you there. The general public (non-members) is invited to see our public service capability. Members and guests are also invited.

DINNER-DANCE 1980

Mark your calendar now so you can attend the Annual Valentine Dinner-Dance. This years affair is shaping up to be a memorable event.

The Date: February 9, 1980

The Time: 7:30 p.m.

The Place: Hospitality House
2226 Penfield Road
Williamsburg Room

Tickets will be available at our January meeting for \$10.00 each.

The entree's this year are Chicken Breast, stuffed with Canadian bacon and cheese, or, Sirloin of Beef. Please specify your choice when purchasing your tickets.

While this traditionally been the evening where the yl's have been given special thanks for the consideration which they have shown us, the same enjoyable evening with friends is open to you all, stag or drag, and we encourage and hope that you will attend.

Contact Len Gessin, WA2ZNC, at 248-2511 or Alan Komenski, AC2K, at 248-2497 for tickets.

VE TEAM

The next **ALWAYS FREE** testing session:
 Saturday January 18th (Third Saturday)
 Rochester Institute of Technology
 Kate Gleason College of Engineering
 Gleason School of Engineering
 Room 3139, Bldg. 9
 Use "J" parking lot

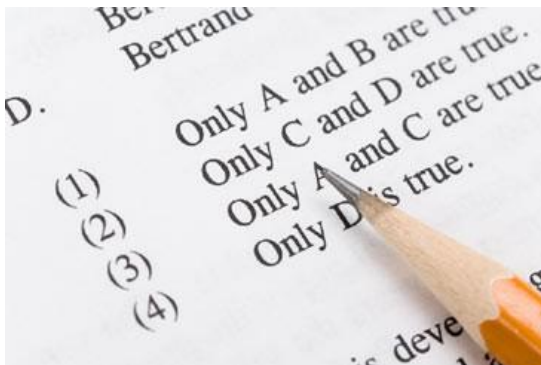
Registration at 9:45AM
 Testing at 10:00AM

You do not have to preregister.

To avoid giving your SSN go to:
<http://wireless.fcc.gov/uls/index.htm?job=home>
 Register and bring the resultant FRN to the exam.

For more info and a map:
https://rochesterham.org/license_testing.htm

Don Kiser - AC2EV
 RARA Board member
 VE Team Leader
 585-613-1035



Orion Roberts	KD2TAJ	T	Gared Roessel	KC2UET	G
James Cook	KD2EHP	G	Alexander Tollman	KC1IXJ	G
Zachary Eberhardt	KD2TAK	T	Leo Mahdessian	KO4ABS	T
Andrew Joiner	KD2TAL	T	Sarah Phillips	KD2TCE	T
Seth Irwin	KD2QZG	G	Scott Laycock	W2SCL	G
Andrew Park	KD2TCF	T			

New licensees names are in BOLD

RADIO ELMERS

Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarlso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@arrl.net
Don Kiser	AC2EV	N Greece	dkiser100@gmail.com
Karl Heinz Kremer	K5KHK	Chili	k5khk@khk.net
Tim Magee	WB2KAO	Greece	585-704-5747
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Dan Waterstraat	W2DEW	Henrietta	higreen@rochester.rr.com

CW ELMERS

Name	Call	Area	Email
Ned Asam	W2NED	Pittsford	w2ned@frontiernet.net
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Pete Fournia	W2SKY	Penfield	pfournia@gmail.com
Bill Hopkins	AA2YV	Brighton	whopkin4@naz.edu
Bob Karz	K2OID	Webster	rkarz@rochester.rr.com
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com

RaRa CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

January 2020						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 ROC City Net 8:00pm 1.924 MHz SARTG New Year RTTY Contest AGCW Happy New Year Contest AGCW VHF/UHF Contest QRP ARCI New Years Sprint CWops Mini-CWT Test UKEICC 80m Contest	2 ARES Net 146.61 MHz 7pm NRAU 10m Activity Contest SKCC Sprint Europe QRP Fox Hunt NCCC Sprint	3 RDXA Happy Hour, Macgregor's Bar, 1129 Empire	4 AWA Museum Open 1pm - 5pm PODXS 070 Club PSKFest WW PMC Contest RSGB AFS Contest, CW ARRL RTTY Roundup ARRL Kids Day EUCW 160m Contest
5 ARRL RTTY Roundup EUCW 160m Contest	6 IQRP Quarterly Marathon	7 AWA Museum Open 10am-3pm QRP Fox Hunt Phone Fray IQRP Quarterly Marathon	8 ROC City Net 8:00pm 1.924 MHz IQRP Quarterly Marathon AWA Linc Cundall CW Contest	9 ARES Net 146.61 MHz 7pm QRP Fox Hunt NCCC Sprint IQRP Quarterly Marathon AWA Linc Cundall CW Contest	10 RDXA Happy Hour, Macgregor's Bar, 1129 Empire IQRP Quarterly Marathon	11 AWA Museum Open 1pm - 5pm IQRP Quarterly Marathon AWA Linc Cundall CW Contest YB DX Contest Old new year Contest UBA PSK63 Contest SKCC Sprintathon North American QSO Party, CW
12 IQRP Quarterly Marathon AWA Linc Cundall CW Contest SKCC Sprintathon North American QSO Party, CW NRAU-Baltic Contest, SSB, CW DARC 10M Contest RSGB AFS Contest Classic Exchange, CW 4 States QRP Group Sprint	13	14 AWA Museum Open 1pm - 5pm QRP Fox Hunt Phone Fray	15 RaRa Monthly Mtg 7:00pm, BSA HQ, Brighton Henrietta TLR ROC City Net 8:00pm 1.924 MHz CWops Mini-CWT Test	16 RaRa BoD Meeting 5:45pm Novaworks 333 Metro Park Rochester 14623 ARES Net 146.61 MHz 7pm QRP Fox Hunt NCCC Sprint	17 RDXA Happy Hour, Macgregor's Bar, 1129 Empire LZ Open Contest	18 AWA Museum Open 1pm - 5pm Hungarian DX Contest RSGB AFS Contest, Data North American QSO Party, SSB WAB 1.8 MHz Phone NA Collegiate Championship,SSB ARRL January VHF Contest Feld Hell Sprint
19 Hungarian DX Contest North American QSO Party, SSB ARRL January VHF Contest Feld Hell Sprint Run for the Bacon QRP Contest	20	21 AWA Museum Open 1pm - 5pm QRP Fox Hunt Phone Fray RDXA 7.30pm Monroe Cty EOC	22 ROC City Net 8:00pm 1.924 MHz CWops Mini-CWT Test SKCC Sprint	23 Monroe Cty ARES 6pm, Red Cross Center, Prince St QRP Fox Hunt NCCC Sprint	24 RDXA Happy Hour, Macgregor's Bar, 1129 Empire CQ 160-Meter Contest, CW	25 AWA Museum Open 1pm - 5pm CQ 160-Meter Contest, CW REF Contest, CW BARTG RTTY Sprint UBA DX Contest, SSB Winter Field Day
26 CQ 160-Meter Contest, CW REF Contest, CW BARTG RTTY Sprint UBA DX Contest, SSB Winter Field Day	27 QCX Challenge	28 AWA Museum Open 1pm - 5pm QRP Fox Hunt Phone Fray QCX Challenge	29 ROC City Net 8:00pm 1.924 MHz CWops Mini-CWT Test UKEICC 80m Contest	30 ARES Net 146.61 MHz 7pm QRP Fox Hunt NCCC Sprint	31 RDXA Happy Hour, Macgregor's Bar, 1129 Empire	

NEWS FROM AREA CLUBS

MONROE COUNTY ARES / RACES NEWS

Monroe County Amateur Radio Emergency Service (ARES)® is an amateur radio public service organization based in Monroe County, New York, and is open to all licensed amateur radio operators. Monroe County Radio Amateur Civil Emergency Service (RACES) is a program of the Monroe County Office of Emergency Management. We participate in training and emergency exercises so that we can serve other agencies during times of communication failure.



The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month except in July, August, November and December. Anyone interested, members and non-members, are welcome to attend.

On even numbered months the meetings are held at the Monroe County EOC, 1190 Scottsville Rd. (Media Room, 2nd floor, north end). On odd numbered months we meet at the Red Cross, 825 John St., W Henrietta, at 6:00 PM. Please check our website for any schedule changes.

If the doors are locked, call WB2EOC on the 146.61 MHz (-) 110.9 Hz PL repeater.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the N2MPE 146.61 MHz (-) 110.9 Hz PL and 444.45 (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC.

There is no net on nights when we hold our regular meeting, generally on the 4th Thursday of the month.

WEB: www.monroecountymcomm.org

Facebook : Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESny

Severe Weather Alerts: Winter may bring severe weather in the form of heavy snow storms, strong winds, and flooding. If you experience severe weather, especially when accompanied by damage to property in your area, listen to your local ARES/RACES repeaters for information. While official ARES/RACES activation could be a possibility, it is more important that we open a spontaneous net simply to share information about weather conditions in your immediate area. Don't wait for someone else to do it. Pick up the microphone and start a net. Have each check-in station give you a situational awareness report and emergency power report. If you don't have a copy of the directed net protocol, you can find one at the WEB address listed above. (Activities/ARES Net/ Net Script/

Downloads). We encourage all amateur radio operators to take a free Skywarn TM class offered by the National Weather Service. The schedule of classes can be found at <https://www.weather.gov/buf/skywarn>

Monroe County ARES
Ralph Dutcher, Net Control - KD2BDZ@arrl.net

ROCHESTER DX ASSOCIATION, RDXA

RDXA meets the 3rd Tuesday of every month (September through June) except for December, which is the Annual Holiday Banquet. Meetings are open to everyone and all are encouraged to attend.



January meeting is a presentation by Bill Rogers, K2TER, on the ICOM IC-9700.

Meetings are held at the Monroe County EOC 1190 Scottsville Rd. (second floor), Rochester, NY 14624 at 7:30PM.

ROCHESTER RADIO REPEATER ASSOCIATION

The Rochester Radio Repeater Association, RRRRA invites you to attend its January 17, 2020 meeting. Meetings are held on the 3rd Friday of the month in the Pittsford Town Hall Basement starting at 7:30 PM.

No program was determined when this article was written. The meeting program will be posted on RRRRA's web site at www.k2rra.org

We would like to have Members from the Rochester VHF Group give a presentation on the upcoming January VHF Sweepstakes. The January Sweepstakes is one of the few VHF / UHF contests that offers an ARRL award for FM activity. Even an HT can get you in on the excitement. You will get to see actually how far you can communicate. You can either join the contest or hand out points to those that are working the contest. Come and get the details at our January meeting.

The RRRRA officers are Bob Shewell, N2HJD President, Bob ODell, N2BZX Vice President, ED Wilkonski, KC2WM Secretary, and Bob Smith, NS2B-Treasurer / Membership Chairman. RRRRA also accepts donations to the club. If you are not currently a member and want to support RRRRA, you can join at our monthly meeting or on our web site www.k2rra.org

ROCHESTER VHF GROUP

In lieu of a meeting, the Rochester VHF Group is focusing on getting prepared for the January VHF Contest (see article elsewhere in this issue).

We invite VHF-capable amateur radio operators (especially those that are newly licensed) to power-up on non-repeater simplex frequencies and make contact with as many other stations as possible.

- 6 meters: 52.525 MHz
- 2 meters: 146.55 MHz
- 135 cm: 223.50 MHz
- 70 cm: 446.00 MHz

You can contact the same station on another band for additional QSO's. Mobile stations (called "Rovers") may be re-contacted when they move to a new grid.

For full rules: <http://www.arrl.org/january-vhf>
www.rvhfg.org

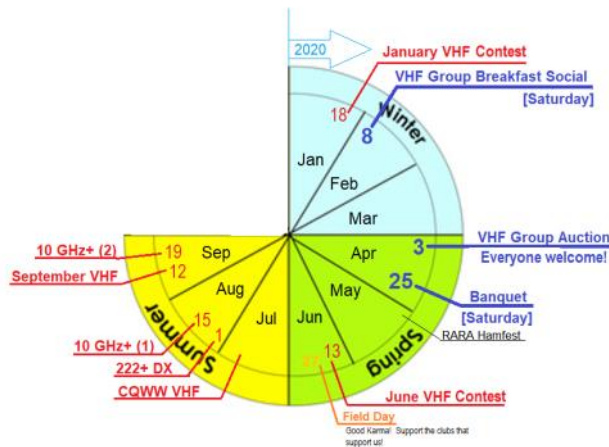
XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club meets the 2nd Thursday of each month. The meetings are 6PM at the Webster Recreation Center. Look for details on our website <http://xarc.us>

DRUMLINS AMATEUR RADIO CLUB

The Drumlins Amateur Radio Club meets every third Wednesday of the month at 7:30 PM at the Wayne County EMO/Sheriff's Office 7376 State Hwy 31 #1000, Lyons, NY 14489. Doors open at 7 pm, meeting starts at 7:30 pm. Announcements will be made on the 146.685 repeater. The Drumlins ARC website address is <http://drumlinsarc.us/>

The VHF Groups' 2019-20 Club Year



AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

ARAST meets the third Thursday of every month at the Town and Country Fire Department on Gardner Rd in Horseheads New York. Chemung County ARES (CCARES) meets the first Tuesday of the month except February at Harris Hill. See www.ccares.info for details. CCARES covers the entire area in Chemung, Schuyler and Steuben counties and all are welcome.

Communicators are needed to help out with the 2019 Wineglass Marathon October 6, 2019 (one week following the Hamfest). If you would like to help out, contact the emergency coordinator: emergencycoordinator@stny.rr.com

Our website is still under construction. It is anticipated that construction will continue well into the year. Until that is finished check us out at www.arast.info.

Don't forget to check out our repeaters when you visit the area. The N3AQ 147.36(+) and the 146.70(-) are the principal 2 meter repeaters. Also Echolink is available using the call sign KA2BED-R. Check it out. A full list of available repeaters that can be heard in the twin tiers area surrounding Chemung County can be found at www.arast.info/arast_website/public/repeaters.php.

COMMUNITY AMATEUR RADIO CLUB, CARC

If you are interested in being a part of this forward thinking and active club, visit us at a meeting or join us on one of our weekly nets. We meet at the Hoag Library (134 S. Main St. Albion, NY) on the first Saturday of each month at 7PM. Each meeting has a brief training/refresher period with upcoming topics including: net protocol, repeater set-up/maintenance, and digital signaling. The club holds a net every Sunday evening at 8pm (winter) and 9PM (summer) - 0100 UTC Monday - on 147.585 simplex, and we host the Thursday Night Social Net, Thursday at 8:30PM on 147.285+. We'd love to hear you check-in!

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communication modes. We were formed in 1994 to foster the development of local and regional packet radio networks using AX25 and TCP/IP. Today we have members using the club sponsored DSTAR repeater (KB2VZS on 444.8MHz), several personal and publicly accessible DSTAR hotspots, Yaesu System Fusion systems on non-club repeaters and DMR systems through repeaters and personal hotspots. DCAP members meet for breakfast at 7AM nearly every Saturday morning at Rikki's Family Restaurant in the village of Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715MHz with a PL tone of 110.9Hz.

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

The purpose of our association is to:

- promote interest in Amateur Radio communication and advancement of the radio art.
- conduct programs, training, and exercises that enhance the skills of the members, and educate the community.
- develop ties with other services and establish relationships with community organizations.
- provide emergency communication services.
- promote enjoyable Amateur Radio related events.

The association was incorporated in 1991 and has been a vibrant part of the community ever since. We have a very active VE testing program. We also participate in numerous public events (the Wineglass Marathon and the Wine Country Classic Boat Regatta are two of the largest).

We operate a system of three repeaters (which are linked), providing a large area footprint for two meter FM amateur use. Please see our website for details. (klara.us)

Our meetings are held on the second Wednesday of each month at the Civil Defense and Fire Training Center on Route 54 in Bath, NY.

SQUAW ISLAND AMATEUR RADIO CLUB, SIARC

The Squaw Island Amateur Radio Club (SIARC) meets every second Wednesday of the month at 7:30PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell. We have License Exam Testing every other month which begins at 6:30PM. The next meeting will be Wednesday, January 8th. There will be license testing starting at 6:30 PM. The January meeting will be our Flea Market. So bring the items you are looking to sell. . 73's Steve Benton VP SIARC WB2VMR

INTERLOCK ROCHESTER - K2HAX - ROCHESTER'S HACKERSPACE

Visit our website at <http://www.interlockroc.org/>,
contact us at info@interlockroc.org,
or find us in #interlock on Freenode IRC.

ROCHESTER MAKERSPACE

For more information visit <https://www.makerspacerochester.org/hamradio>

GENESEE VALLEY AMATEUR RADIO ASSOCIATION

Email n3dsp@lafireline.net for details.

ASTRONOMY SECTION ROCHESTER ACADEMY OF SCIENCE

For more information visit <http://www.rochesterastronomy.org/>

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.

RArA MARKETPLACE

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Contact us for details at
editor@rochesterham.org.

RARA OFFICERS, DIRECTORS AND COORDINATORS

OFFICERS

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Vice-President: Scott Theis, W2LW	(845) 774-9809	sa_theis@hotmail.com	Secretary: Karl Heinz Kremer, K5KHK	(585) 503-7214	k5khk@khk.net

DIRECTORS

Tim Barrett, K9VB	(585) 582-2108	tim.k9vb@gmail.com	Don Kiser, AC2EV	(585) 613-1035	dkiser100@gmail.com
Tim Brown, WB2PAY	(585) 750-2087	tjbrown@rochester.rr.com	George Lama, KC2OXJ	(585) 371-8324	KC2OXJ@gmail.com
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Membership Secretary	Tim Barrett, K9VB	tim.k9vb@gmail.com			

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Rochester Radio Repeater Association (RRRA)

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Rochester VHF Group (RVHFG)

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Squaw Island Amateur Radio Club (SIARC)

Steve Benton, WB2VMR: sbenton2@rochester.rr.com

XRX Amateur Radio Club

Brian Donovan, K2AS: k2as@outlook.com

FEBRUARY RAG DEADLINE JANUARY 15, 2020 RARA meets at 7PM on the first



Wednesday of each month. Join us at:

Seneca Waterways Council, BSA Headquarters
2320 Brighton Henrietta Town Line Rd
Rochester, New York 14623

GET DIRECTIONS

Rochester Area Repeater Listing

THE RARA RAG

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